

The Times and Register.

VOL. XXIX. No. 24.

PHILADELPHIA, JUNE 15, 1895.

WHOLE No. 875.

Original.

THE NEUROTIC ELEMENT IN PULMONARY CONSUMPTION*

THOMAS J. MAYES, A.M., M.D.,
Philadelphia, Pa.

Professor of Diseases of the Chest in the Philadelphia Polyclinic, and Visiting Physician to the Rush Hospital for Consumptives in Philadelphia.

That disorder of the nervous system plays a prominent part in the production of pulmonary consumption I have long been convinced, and in the various papers which I have written on this subject during the last seven or eight years I have made an effort to show the data on which this theory rests, and in response to the kind invitation of your secretary I appear before you to-day for the purpose of calling further attention to this interesting subject.

I am by no means the first advocate of the nervous theory of pulmonary consumption. As far back as 1842 Cheneau (*"De l'Influence de la Hautieme Paire dans la Production de la Phthisie,"* Paris, 1842) attributed this disease directly to disorder of the pneumogastric nerves, and indirectly to an abnormal condition of the central nervous system. In 1850 Dr. J. C. Holland defined pulmonary consumption as a disordered condition of the nervous system. Dr. Copland regarded tuberculosis and scrofula as being dependent on abnormal conditions of the nervous system, and believed that the accompanying disturbances of digestion, assimilation, circulation and even the local determination of these diseases are traceable to the state of the nervous

influence on these parts. Laycock, in his clinical lectures on *"Physiological Diagnosis of Disease"* (Medical Times and Gazette, 1862, p. 205) says that "defective pneumogastric innervation consequent upon a loss of cerebro spinal power is a very common predisposing and exciting cause of phthisis." Dr. Clifford Allbutt, in discussing the pathology of a variety of phthisis, states (Medical Times and Gazette, Vol. II, p. 613) "The more, however, I study the relations of the disease, the more I am satisfied that the lung mischief is also a neurosis—by which I mean, that the lesion is one not originating in the local tissues, but in the nervous system." Dr. Clouston, in his recent work *"The Neuroses of Development"* says (p. 92) that "facts seem to show that if tuberculosis cannot itself be called a neurosis it is in most cases dependent for its existence on a trophic neurosis, or bears the closest affinity to it."

From this it will be seen that this subject has interested some of the most prominent minds in the medical profession during the last 50 years. Indeed, when the richness and fertility of this field of study is surveyed, one is astonished to find how completely it has fallen into abeyance at the present time. It is practically forgotten, yet I believe that a full and thorough examination of its premises will give us proof of the most convincing character that it is the only key to solve the complex etiology of the disease under consideration.

At the very outset I would lay down the proposition that any agent or influence which has the power of disordering or interfering with the integrity of the respiratory

* Read before Section on Neurology and Medical Jurisprudence of the American Medical Association, at its meeting in Baltimore, May 7, 1895.

nerves in particular, or with the nervous system in general, also has the power of producing pulmonary consumption and other forms of lung disease. Thus in a recent canvass of the literature of this subject, I found the records of over a hundred cases of phthisis in which the pneumogastric nerves, or the respiratory centres, were compressed or injured or diseased in connection with syphilis, alcoholism, diphtheria, measles, diabetes, multiple neuritis, locomotor ataxia, bulbar paralysis, tumor of the pons and medulla oblongata, etc.

Phthisis follows in the wake of many nerve poisons. Mercurial tremor and paralysis are well known, but the investigation of Kussmaul develops the fact that the majority of those who suffer from mercurial intoxication, as looking-glass gilders, mercury miners, etc., are very liable to do, also fall victims to pulmonary consumption. Even the vitality of the offspring of those who suffer from mercury intoxication is vitiated, for it is said that scrofula, rickets and pulmonary consumption are exceedingly prevalent in the children of those who are engaged in mercury manufacture; and that it induces abortion and still-births among female employees.

Dr. Baumler cites an interesting instance of mercurial intoxication in a family. Male, 69 years old, became a gilder when 39 years old and worked at it for 25 years, when he was compelled to seek other employment on account of serious mercurial poisoning. He was well and worked for 12 years, when he became salivated, suffered from stuttering, tremor, loss of memory, shedding of teeth, etc. He was married three times and all his wives followed the occupation of gilding. From the first union there were four children, one of whom died of gangrene of both feet, and the other three and the mother died of consumption. From the second union there were two children who, with their mother, died of consumption. From the third union all the children who were born before the mother was employed in gilding were well; while one who was born after this period was a weakling and died of cause

not given, but the mother died of consumption.

Lead is another metal which has the power of deteriorating the nervous system and of provoking pulmonary phthisis. Statistics show that this disease is from two to three times more prevalent among lead workers in Wales than it is among farmers living in the same locality, or among the general population of England and Wales.

Among the agents which are most potent in the production of phthisis, I would place the abuse of alcohol; and I would call the attention of those to this subject who are directly engaged in the study of inebriety. I know that my friend Dr. Crothers has already made some valuable contributions to this question, and I hope to hear of his further experience in this direction to-day. It is well known that this agent exerts a poisonous influence on the nervous system and especially on the peripheral nerves. Very frequently the nerves do not show any marked changes, but on closer examination evidence of parenchymatous degeneration with more or less interstitial neuritis is discovered, suppression of the catamenia in women, paralysis of respiration and of deglutition and disease of the vagi and of the lungs are also observed to be of common occurrence.

Syphilis is another nerve poison which is often the unsuspected cause of pulmonary disease—the typical pathological changes of which are an abundance of interstitial connective tissue proliferation, per-bronchial induration, diffuse thickening of the lobular parenchyma, syphilitic gummata and nodular induration or broncho pneumonia. The poison seems to attack the cranial in preference to the peripheral nerves. That the vagi are frequently implicated is shown by a number of cases which I collected.

Whooping cough is pre-eminently a specific spasmodic affection of the respiratory nerves. Hufeland, Hoffmann, Wendt, Walshe and Puldame ascribe its principal lesion to irritation of the pneumogastric nerve.

The pulmonary changes of whooping cough are interesting because they show the direct relationship between the disease of a nerve and that of the organ which it supplies. In all severe cases there is congestion of the pharyngeal, laryngeal and bronchial mucous membrane and of the lungs, together with dyspnea and feebleness of the respiratory sounds. There may also be a shade of dullness in some parts of the lungs. Epistaxis, hemoptysis, emphysema, chronic bronchitis, broncho-pneumonia and consumption are frequent complications, especially in the offspring of those who bear a history of chest disease.

Whatever the precise etiology of influenza may be, it is essentially a disease of the nervous system. Its morbid anatomy is principally seen in the meninges of the brain, spinal cord and peripheral nerves. Pulmonary edema, broncho-pneumonia, capillary bronchitis and pleurisy are among its common sequela. The pulmonary disease was believed by Graves to be due to paralysis of the vagi, and Walshe says this poison seems to exert a special influence on the pneumogastric nerve. Cerebro-spinal meningitis—an affection which chiefly involves the medulla oblongata and its immediate connections—is nearly always associated with pulmonary derangement. Then there is another group of diseases—the most prominent of which are beri-beri, pellagra, diabetes and leprosy—in which disease of the nervous system and disease of the pulmonary organ play a prominent role.

Epilepsy is also a disease in which the medulla oblongata is involved, and it is in the latter area that we will have to seek an explanation for the ultimate and long-recognized association between this disease and pulmonary disease. Echeverria in his work "Epilepsy" states (p. 313) "I have most closely investigated the relation of pulmonary tuberculosis and epilepsy, and undoubtedly the genesis of tubercles in the lungs is favored by the lesion in the medulla oblongata proper to epilepsy. I have traced the pulmonary trouble from its inception and feel convinced that

the association is more than a casual coincidence of both morbid conditions." Besides Echeverria, Van der Kolk, Jobert de Lambelle, Stuart Cooper and Rostan reported a number of cases of epilepsy associated with pulmonary disease in which the pons varoli, medulla oblongata and vagi were disordered.

Asthma is a spasmodic affection of the pneumogastric nerve and it is therefore of great interest in this connection to find whether this disorder develops into more serious lung disease or not. Asthmatics are generally supposed to be long-lived, but I do not believe there is much clinical evidence to support this belief. Of course there are some exceptional cases which undergo spontaneous cure in the later years of life, but in the majority of these sufferers the attacks incline to become continuous and it is to these my remarks refer. I believe that the tendency in such is a termination in pulmonary consumption. In support of this Fuller ("Diseases of the Chest") states that, in spite of the belief that asthma and pulmonary consumption are antagonistic, many asthmatics die of the latter disease. Williams ("Pulmonary Consumption") shows that in 385 cases of phthisis seven began with asthma, and states that the tendency of asthmatic parents to have phthisical children is hardly sufficiently recognized. James ("Pulmonary Phthisis") asserts that asthma and whooping cough are likely to predispose to or terminate in phthisis.

Hysteria implicates the respiratory organs in the form of accelerated breathing, dyspnea, aphonia, laryngeal and pharyngeal paralysis, etc., and has an innate tendency to develop into pulmonary disease either in the individual or her offspring. Professor Grasset ("Brain," vols. 6 and 7) found that among the patients, brothers and sisters, grandparents and uncles and aunts of 44 hysterical patients, there were 60 who died or suffered from phthisis.

Most all of these interesting cases furthermore demonstrate that phthisis may follow, or be followed, alternate with, or evolve from hysteria and other nervous disorders in the

same individual. Thus in cases 2, 26, 27, 30, 42 and 43 phthisis followed hysteria; in case 4, bronchitis followed catalepsy; and in case 17, epilepsy preceded phthisis. In case 28 there was alternation between hysteria, phthisis and epilepsy; in case 29 whooping cough and hysteria preceded phthisis; in case 31 phthisis existed first, this was displaced by hysteria, after which the patient suffered from sciatica, then from boils, and in the end recovered altogether. In cases 32 and 33 there was alternation between phthisis and hysteria, and final recovery from both diseases. In case 34 the patient became phthisical, and then suffered from hysteria, during which time the phthisis improved, and in the end she became paraplegic. In case 35 hysteria came first and then phthisis, after which the hysteria abated and the phthisis progressed. In the end the patient improved. In case 36 the patient suffered from phthisis and then became hysterical. She recovered from phthisis, but remained hysterical. Case 37 had phthisis first, then hysteria, after which the phthisis improved and disappeared, but the hysteria continued. Case 38 was phthisical first, then became a somnambulist, after which he recovered from phthisis. Patient 39 had pneumonia, then paraplegia, then phthisis and finally hysteria. Recovered from phthisis. In case 40 there was phthisis, then hysteria and hemiplegia, after which phthisis abated. In case 41 bronchitis appeared first, then convulsions, then phthisis and finally hysteria. Patient improved in the end. In case 44 hysteria was entirely displaced by phthisis.

Idiocy has a powerful bearing on this subject. Thus in 2380 cases of idiocy and imbecility which were admitted into the Royal Albert and Darenth Asylums in England (see Tuke's "Dictionary of Psychological Medicine," Vol. 1, p. 664) it was shown that a family history of consumption existed in 674 of the inmates, or in 28.31 per cent. Dr. Langdon Down, physician to the Earlswood Asylum for idiots states ("Mental Affections of Childhood and Youth," p. 221) that the statistics of

London show that the deaths from phthisis constitute 115 per 1000 of the general mortality. His statistics at Earlswood indicate that phthisis was the cause of death in 398 per 1000 of the general mortality. His last hundred post-mortem records show that 62 were phthisical, in some of which cases there was no record of disease in the family, and he believes that in these cases phthisis was the sequence of idiocy. "Defective innervation, in all probability, led to malnutrition and predisposed to a tubercular condition." Dr. Down also contributes the histories of 20 families, each of which was burdened with idiocy, and among the parents, sisters, brothers, grandparents, uncles and aunts of which there were 35 who suffered from consumption.

The late Dr. Isaac N. Kerlin, superintendent of the Pennsylvania Institute for Feeble-minded Children, in an essay (Tran. Penna. State Med. Society, 1880, Part I, p. 161) states that if the tables which he presented in this paper were prepared by a special advocate to prove that consumption is the main factor in the generation of idiocy the effect could not be more startling; but "as they are the result of careful inquiry, without any theory to prove or disprove, I ask for them your respectful judgment." In the table to which he refers he gives the histories of 100 families in each of which there existed a case of idiocy, and this shows that there were 145 members of these families, only including parents, sisters, brothers and grandparents, who were afflicted with pulmonary consumption. In view of the fact that only about 17 per cent. of the general population die of pulmonary consumption this death rate is simply enormous. It means that the mortality from this disease is from eight to ten times greater among this unfortunate class than it is among the ordinary population.

Moreover, no one is surprised to find that insanity and epilepsy create a special liability to idiocy in the offspring, but it is certainly very startling, especially in the light of its supposed bacillary origin, that

consumption is more powerful in this respect than any other cause which is known to lead to this disease. Thus the statistics of the Royal Albert and Darenth Asylums, already alluded to, show that among the hereditary causes of 2380 cases of idiocy and imbecility consumption ranks the highest, having a percentage of 28.31, while insanity, epilepsy and alcoholism have a percentage of 16.47, 8.69 and 16.38 respectively.

Dr. Down, in the work already referred to, makes the following pertinent reflections concerning the relationship which exists between phthisis and disorder of the nervous system: "It appears to me that tuberculosis must be accepted as one important cause of idiocy; that it impresses special characters thereon while imparting a strong family likeness to the subjects of this class. It is no less clear to me that idiocy of a non-tubercular origin leads to tuberculosis. Whether this arises through the influence of the pneumogastric nerve, mal-assimilation of food, or defective innervation, it cannot but be regarded that the connection between these two maladies is by no means accidental, and that a due appreciation of this relation is necessary to those who would treat effectively congenital mental lesions.

The clinical association between insanity and pulmonary consumption has been noticed by many authors, among whom are Von der Kolk, Esquirol, Georget, Burrows, Ellis, McKinnon, Clouston, Boyd, Savage, Norman, Tuke, Laennec and others. Mandsley says ("Pathology of Mind," p. 113): "Perhaps I might set it down as a true generalization that the morbid neurosis, when it is active and gets distinct morbid expression, may manifest itself in four ways: (a) In disorder of sensation—for example, paroxysmal neuralgia; (b) in disorder of motion—for example, epilepsy; (c) in disorder of thought, feeling and will—mental derangement; (d) in disorder of nutrition—whereof diabetes is the earlier and phthisis is the later stage." Doctor Blandford states ("Insanity and its Treatment," p. 56): "I have found, however, that

phthisis and insanity do frequently co-exist in the same family." Doctor Stearns says (American Journal of Insanity, 1888, p. 87): "We often see a consumptive having a child which instead of developing consumption develops insanity, and vice versa, an insane person may have children of a phthisical tendency." Doctor Mosher relates an interesting case (Medical Record, 1895, p. 390): Female, aged 16, was admitted September 25, 1893. Said to have been insane for eight years, and her attacks were of epileptiform nature, characterized by sudden outbreaks of violence, and probably associated with unconsciousness. Heredity was the assigned cause, eight paternal great uncles and great aunts had died of phthisis, and her paternal grandfather was epileptic in youth and neurotic. During her residence of about six months she had intractable bronchitis and laryngitis with aphonia. Clouston, in his "Neuroses of Development," makes the observation (p. 91) that the death-rate from phthisis among the insane is four times higher than among the general population, and that both diseases are very common in different members of the same family, and that heredity towards phthisis may determine insanity and vice versa. The same authority also remarks ("Lectures on Mental Diseases," p. 461) the form of insanity which is commonly associated with phthisis is monomania of suspicion and melancholia. Nearly all pure cases of this kind sooner or later die from phthisis. The most marked cases of phthisical insanity are those with a strong hereditary tendency to both insanity and phthisis or to the neuroses. It is surprising how often both diseases occur in different members of the same family. * * * The constitutional weakness which tends to end in insanity is akin to that which tends to end in phthisis (p. 468). Schroeder Van der Kolk states (Sydenham. Publ. Vol. xi, p. 170) that phthisis and insanity frequently co-exist, or alternate with one another. We often see phthisis occurring in families, some members of which are affected. Doctor Busi, who collected his statistics at the

asylum for the insane at Basle, makes the interesting observation (*Neurology Centralblatt*, 1887, p. 282) that in many cases we must regard tuberculosis and insanity as an expression of the same constitutional weakness. In 50 per cent. of his insanity cases there was tubercular heredity; in 47.2 per cent. there was neuropathic heredity, and in 20 per cent. there was a mixture of the two. On account of the frequency with which both diseases exist in the same families he believes that there is an internal relationship between the tuberculous and psychopathic constitution.

Dr. Bianchi describes a pneumonia (*Neurolog. Centralblatt*, 1890, p. 249) which frequently occurs in paralytics, and which differs clinically and anatomically from croupous pneumonia. The temperature is usually low, cough and expectoration are sometimes absent, the respiratory movements are superficial, weak and slow, and the affected lung usually remains in a hepatized condition. Frequently there exist larger or smaller gangrenous foci, and nearly always, if the case is of long standing, a puriform infiltration of the alveoli and bronchi. All these manifestations simulate those of pneumonia which the author produced in rabbits and dogs by section and compression of the vagi. In a number of paralytics who died of pneumonia he was able to trace a primary degenerative atrophy of the vagi, and hence he believes that these pneumonias are dependent on vagus degeneration. He does not believe with Traube and Frey that this pneumonia is engendered by the swallowing of food. (*Shluck-pneumonie*).

This subject is one of vast proportions and if I had time sufficient I might inquire whether the symptomatic and the therapeutic evidence is not equally as favorable to the neurotic theory of phthisis as that is which comes from the pathological side of this question. Do not the weakness, the easy fatigue, the restless sleep, the extreme nervousness which is present in many cases, the dyspnoea, the hoarseness and

aphonia, the thoracic pain, etc., indicate that the principal nature of phthisis is one of nervous exhaustion? And therapeutically is it not true that we get the best results from those measures and agents which prove to be the most efficient in the treatment of nervous diseases? and are not these rest, nutritious food, strychnine, electricity, hypophosphites, cod-liver oil, phenacetin, capsicum, quinine and remedies which appeal to and influence the nervous system?

THE TREATMENT OF ACUTE DYSENTERY.*

BY T. E. SCHOOLAR, M. D.,
Centreville, Ala.

As I have had only a limited time in which to prepare a paper, I will make only a few remarks on the treatment of acute dysentery, with the hope that I will excite some interest in our meetings, and of the possibility of what I have to say upon the subject being of some benefit to some of you.

First, I will refer briefly to a few of the older remedies or measures used for the control of this sometimes annoying and dangerous disease—amazing to the physician and often fatal to the patient.

Only a few years ago it was thought necessary in the treatment of this, as well as most other diseases, to use the lancet, and its use was resorted to in nearly every case, and in every stage, though one of the more progressive physicians said some 50 years ago that vivisection was not to be dispensed with, but it was very necessary that the operation should be performed in the early stages, as the disease itself lowered the vitality so greatly in so short a time that he thought there was more danger than good to be derived from the loss of blood. But a great many bleed their patients at any time, and even many times during the same attack. With such practice I don't think many physicians of to-day will agree.

* Read before the Bibb County Medical Society, April 2, 1895.

Next to the lancet came mercury, usually in the form of calomel, and this has been, and is still, used extensively by a great many, or I might say a majority use it up to the present day. Perhaps it is of some good in some complicated cases, but after a thorough trial I am convinced that there is little good to be obtained by its administration in a typical case of dysentery, and have thought I could see that the symptoms were aggravated by its use, though I admit that I have never used it, as directed by olden writers, until the "mouth was touched." Another remedy that has been used perhaps more than any other, and one that is thought by many to approach near a specific is ipecacuanha. During a severe epidemic two years ago I began, and continued its use for some time, with the impression that if this disease could not be controlled by its use it was almost useless to try any other treatment. I used it in every way I could find any others had used it with any benefit, but, after repeated trials, I abandoned it as being useless. In the same epidemic I watched it used by several older physicians than myself, and always with the same result. Some authorities claim it is without effect in some epidemics, but in a majority of epidemics it is without an equal. This one in which I used it was possibly one of the epidemics referred to as being without effect. I was so entirely unsuccessful in its use in this epidemic my faith in its use will have to be strengthened considerably to rely upon it in any case of dysentery. Castor oil has been used to some extent, and perhaps with benefit, but I have not used it sufficiently to become wedded to its use.

Next in the list I will take the neutral salts, the most important of which is the sulphate of magnesia, which has for many years been used with more or less success. From its depleting action and sedative and astringent after-effect upon the intestinal canal, I am lead to believe that it is without an equal with which to begin the treatment of this disease. I have found under its use,

combined with sulphuric acid, preferably the aromatic sulphuric acid, and a few drops of *ol. mentha piperita*, if much nausea, or "weak stomach," the severe hypogastric pain will nearly always be to a great extent, and often entirely, relieved. In a majority of the cases the amount of blood in the discharges from the bowel will be lessened, and, in a great many instances, stopped altogether. I also think at any time during the treatment, if something is desired to unload the bowel, there is none of the purgatives any better than the sulphate of magnesia.

I next come to the use of opium, and, perhaps, the most important of all. It is a drug that has long been recognized as one that cannot easily be dispensed with in the treatment of this disease. It has always been known that an inflamed part should be at perfect rest, if possible, and I have found no other way of keeping bowel at rest better than by the use of this drug. I prefer its use in the shape of sulphate of morphine, hypodermically, and combined with atropia sulphate. If I could be with patient at all times I would use it always hypodermically. From the action of atropia on the mucous membranes I am a little partial to its use, and often found decided benefit by keeping patient a little under its influence during the entire treatment. By the use of these two remedies you can keep comparative control over the number of passages from bowel, and they also help greatly to support the patient. If by using this treatment I fail to abort the attack in the first forty-eight hours, in addition to the morphine and atropine, I resort to astringents, preferably the vegetable astringents, usually *F. E. Hematoxylon*, and, from the good results obtained from sulphuric acid upon ulcers, and from its hemostatic, antiseptic and astringent action I almost always combine it with the *F. E. Hematoxylon*. I also use with these the *camp. tr. opium*, if it is so I cannot be with the patient when necessary to give opium. To disguise the taste, and as a stomachic, I add *syr. zingiber*.

I do not like the use of hot applica-

tions, though they may be grateful to the patient; it seems to me to be a bad plan to cause greater pelvic congestion by their use when we can by careful administration of opium obtain the same, or better, result. As to the use of injections, I found none better than the use of the white of eggs. I think it better to use it after thoroughly cleansing the rectum with a solution of hydrogen dioxide. In the few cases I have tried the egg enema it arrested the hemorrhage promptly, and seldom found it necessary to use oftener than once a day, and for more than three or four days.

During the entire course of the disease I am always very careful to have them take a light and nourishing diet; something that will leave as little waste matter as possible.

I think it very necessary that the patient should be kept in bed until convalescence is fully established.

It will often, but not in all cases, become necessary to use some stimulant to sustain their strength, especially in old persons.

In the way of prophylaxis it is well to thoroughly disinfect all discharges from bowel of patient and keep body of patient and clothing as thoroughly clean as possible.

PLEURISY WITH EFFUSION CURED WITHOUT OPERA- TING.

Bosch reports a case of a little girl of 9 who entered the hospital with all the symptoms of right-sided pleurisy; the left side measured 27.5 cm., the right 28.7. The swelling extended to the third rib; respiration 46; temperature 38.1 degrees C. Before resorting to thoracentesis the author determined to try medicinal agents and, if these failed, to operate. Treatment—milk diet for eight days, cantharidal collodion as a revulsant, citrate of magnesia and calomel as purgatives, digitalis, strophanthus and nitrate of potash as diuretics. Under this treatment the effusion rapidly diminished and the patient left the hospital after a month's time completely recovered.—*Journal A. M. A.*

The Times and Register.

A Weekly Journal of Medicine and Surgery.

FRANK S. PARSONS, M. D.,
EDITOR AND MANAGER.

Subscription Price, . . . \$1.00 Per Year.

Send money by bank check, postal money or express order, payable to The Medical Publishing Co.

EDITORIAL STAFF.

W. H. PANCOAST, M. D., Philadelphia, Pa.
T. H. MANLEY, M. D., New York, N. Y.
E. W. BING, M. D., Chester, Pa.
S. H. MONELL, M. D., New York, N. Y.
J. R. CLAUSEN, A. M., M. D., Philadelphia, Pa.
AD. MEYER, M. D., Chicago, Ill.
LOUIS LEWIS, M. R. C. S., (Eng.) Phila., Pa.
J. A. TENNEY, M. D., Boston, Mass.
E. B. SANGREE, A. M., M. D., Philadelphia, Pa.
HENRY BURCHARD, M. D., D. D. S., Philadelphia, Pa.

PUBLISHED BY

THE MEDICAL PUBLISHING CO.

Communications are invited from all parts of the world. Original articles are only accepted when sent solely to this Journal. Abstracts, clinical lectures, or memoranda, prescriptions, news and items of interest to the medical profession are earnestly solicited.

Address all communications to

Room 718, Betz Building.

Entered at the Philadelphia Post Office as second-class mail matter.

PHILADELPHIA, JUNE 15, 1895.

THE TREATMENT OF UTERINE FIBROIDS.

Perhaps in the whole domain of surgery there has been no subject which has been more exhaustively considered, and none which, from a therapeutic standpoint, has undergone a more radical revolution than that of uterine neoplasms.

Something more than 20 years ago, when Battey advised castration as a measure of treatment, the conservatives in the profession were startled; not so much because of the moral question involved as the boldness and danger of the measure; but, latterly, surgeons proceed to enucleate those growths with as much indifference as they would perform an amputation.

If we were to be influenced by the reports of some operators and were content to follow their cases no further than the operating table, then we could come to no other conclusion, that that the treatment of these

growths had reached the acme of perfection.

In all truth, however, it must be confessed that some of the statistics which are presented to us are not only misleading but positively false. One of the most noted and brilliant in the field of vaginal hysterectomy has been branded by his own countrymen as a man without honor or principle; hence, wholly unworthy of belief.

Let us for a moment examine into a few features of the question, that we may not be deluded into the fatal error of advising radical measures prematurely.

Uterine fibroids when of small volume and painless, in no manner impair the general health. As a rule, after the menopause they undergo retrograde, atrophic changes.

It is only when they attain great volume or unduly press on the adjacent viscera that the question of treatment rises. And here, we are at two cross-roads—the one leading the way by constitutional, cautious, local treatment, and the other the more radical and alluring, to surgical intervention. Very much may be accomplished in the therapy of these cases by specific medication, massage, electricity, interstitial injections and special alimentation.

There are some cases, though, which resist all palliative methods, and the question of operation is finally forced on us. Here the question at once arises, By what route will we attempt the displacement of these tumors, by the abdomen or the vagina? If our object only, was to enucleate and select that which gives the least mortality, then we would enter by the vagina. But the sequelae after this line of attack are often of the most lamentable description. The ureter is often caught up and opened, fecal and vesical fistula frequently follow, the support of the vaginal vault by the removal of the uterus is gone, and, there is great danger of prolapse and hernia, down through the vulva.

Small tumors, capable of no harm at all, may be detached and drawn through the outlet with about as much ease as we would extract a

tooth; but the uterus must come with it, and our woman is forever unsexed. This is most certainly not in consonance with humane surgery. To attack a tumor of mammoth proportions, which has extensive adhesions by this route, is to invite certain disaster and to fatally mangle and mutilate our patient.

When we enter above the pubes, through the abdominal wall, we must decide on the intra or extra-peritoneal treatment of the pedicle; but, many of these neoplasms are sessile and have no stalk; they are jammed hard and fast into the pelvis, and are adherent to everything they touch. The extra-peritoneal plan, when practicable, provides the greatest safeguards against hemorrhages or sepsis; nevertheless, it entails a long and painful convalescence; purulent infiltration often develops about the stump, and after healing a painful dragging on the bladder may follow, or a hernia may make its way through the opening.

The ideal method, is the intra-peritoneal, though its mortality is the largest. But, let no one undertake its performance who is not well versed in abdominal surgery.

In a large number of cases where the tumor is only subperitoneal, simple decortication and enucleation are all that are required; we leave our patient a whole woman, her ovaries and uterus are intact and we will have no reason to reproach ourselves for a mutilation.

THE RELATION OF MEDICINE TO CYCLING.

In the Medical Chronicle for April Dr T. N. Kelynack discusses the relation of medicine to cycling. In health the use of the wheel tells most directly on the heart, producing marked quickening of the pulse, which may continue as long as the cyclist is riding. Few attempts have hitherto been made to study the physical development of persons who have been using the bicycle properly for years. Dr. G. M. Hammond, of New York, who has examined a

number of cyclists, found in 14 amateurs who had ridden from five to 13 years, traveling from 5000 to 27,000 miles, simple cardiac hypertrophy without dilatation and a breathing capacity above the average. A careful examination of 14 celebrated professional bicyclists failed to show any deformity of the spinal column. All had excessive hypertrophy of the thigh and abdominal muscles, cardiac hypertrophy without dilatation, and, except in two instances, a lung capacity above the average. Cyclists, however, are apt to acquire the bad habit of mouth breathing. In disease the use of the cycle is not necessarily to be proscribed. In some cases of cardiac dilatation slight valvular involvement, and degeneration of the heart muscle, carefully supervised riding on level surfaces may be very beneficial. Varicose veins may also sometimes be relieved by properly regulated cycling. In certain neurotic conditions, especially neurasthenia and hysteria, cycling may be productive of benefit, and it is frequently useful in the treatment of insomnia. Gynecologists have found cycling advantageous in relieving local pelvic congestion. Carefully regulated cycling may be advantageous in certain affections of the respiratory organs, such as latent phthisis. A cautious and restricted use of the cycle has also proved serviceable in cases of functional dyspepsia and constipation, gout, diabetes and general anemia. Dr. Kelynack gives an impartial summary of all the evidence that has so far been collected relative to the evil effects of cycling. Each case must be dealt with individually, but as a general rule the following conditions may be looked upon as making the exercise inadvisable. Arteriosclerosis, tuberculosis, emphysema, extensive valvular disease, asthma, affections of the abdomen and pelvis, obesity, epilepsy and chronic affections of the joints and muscles. Fast and long-distance riding, especially in adolescents, is to be condemned. Straining to climb hills or to meet head winds is injurious. Light, judiciously-selected meals

should be taken at frequent intervals. The use of alcohol, meat extracts and such stimulants as coca is to be prohibited. Women should not ride during menstruation. The clothing should be of wool and adapted to the easy and unrestrained movements of the rider. Dr. Kelynack's article presents one of the fairest statements of the case for and against cycling that we have seen, and gives full references to the literature of the subject. We commend it to the attention of all persons interested in cycling as well as to all members of the medical profession.

INTRAVENOUS INJECTION OF MERCURIALS.

Abadie (Sem. Med., April 27, 1895) demonstrated on two patients his method of administering mercurials by intravenous injection, before the French Society of Dermatology and Syphilography. The injection is made into a vein at the bend of the elbow, and a syringe made entirely of glass is used. The mercurial he prefers is a 1 per cent. solution of cyanate of mercury in distilled water, of which the dose is 1 c.cm. These patients had received numerous injections without inconvenience or accident. In contrast with subcutaneous injections of mercurial salts, which are very painful, the intravenous method is absolutely painless.

Surgery.

IN CHARGE OF
DR. T. H. MANLEY, New York.

BLENNORRHAGIC SALPINGITIS.

Raymond, in a study of specific salpingitis says—*Mercredi. Med.*, 15 *Medici. Society Anatomie*—that the microscopical characters of this infection are quite uniform, as the supuration is in the tubes and not in the ovaries. In some the pavilion of the tube remains open, while in others both ends are closed by adhesive inflammation. This affection has two stages, the acute and subacute.

In either of them the gonococcus and the leucocyte are found in all the invaded tissues through cellular epithelia are scarce. The pus presents the same general aspects as that found in gonorrheal urethritis. It differs from salpingo-ovaritis in the absence of the leucocytes in the latter and besides in the streptococci. When this latter germ is found with gonorrheal salpingitis the inflammation is diffused and the extent of suppurative infiltration large.

TUMORS OF THE CAECUM.

Koerte reports nine cases of extirpation of the caecum. Four were for cancer, four for tuberculosis and one actinycosis, all recovering. This surgeon always makes a lateral implantation of the small intestine into the wall of the ascending colon. After the end of the intestine is invaginated into the large bowel two rows of suture are employed to fit and hold it. (Twenty-fourth German Congress of Surgeons).

THERAPEUTIQUE CHIRURGICALE—FISTULES URETERO-VAGINALES.

Dr. Taffier—*Mercredi. Med.*, No. 15, 169—in an extended contribution gives the etiology and treatment of these fistulas of the ureter requiring surgical relief.

He cites four cases which came under his own care and were all successfully treated. Since, he says, the vaginal route has been so generally selected for the removal of uterine fibroids and cancers of the uterus, these fistulae are becoming very common.

He is positively opposed to removing a kidney for this condition, and, by an elaborate description of operative methods shows how they may generally be readily closed, either by the abdominal or vaginal route. When the quantity of leakage is small and he believes that the ureter is wounded, but not torn completely across, he applies lunar caustic over the curunculous opening,

This hastens healing and complete cure.

When the rent is entirely through the duct our line of approach must be either through the peritoneal cavity from above or below.

In all cases he advises that the free end of the ureter be passed into and firmly retained in the bladder. In nearly all the cases which he had seen, the fistula was on the right side.

TREATMENT AND CURE OF TWO CASES OF CANCER BY SEROPATHY.

Richet and Hericourt have lately extended the application of seropathy to the treatment of malignant growths. On the 9th of February, '95, Richet removed an osteo-sarcoma from the lower limb. Some of the substance removed was filtered, after having been first ground firmly and mixed with water. This material was now injected into healthy animals, on which it produced little or no action. Eight days after they were inoculated they were freely bled and the serum separated from the coagulum. With this fluid injections into a patient suffering from adeno sarcoma were made, being repeated every third day. M. Terrier, who also employed the serum in a woman, says that from the date of the first injection the volume of the tumor began to diminish until after ten months it had so far disappeared that only a small patch of induration remained. This test proved that not only has the serum the property of arresting the progress of a regrowth, but completely and painlessly dissipating all its elements.

The patient on whom Richet employed it was 44 years old, with an epigastric tumor about the size of an orange, which had been diagnosed as a cancer of the stomach. In this case all surgical treatment had been regarded as too hazardous to warrant its trial. It was diagnosed as cancer. Treatment was begun by using this immunized serum, 4 centigrammes in each injection, until 64 centigrammes were employed. The

patient entered Hospital Pitie, March 27. By the middle of April there was a marked change for the better in the general condition. She had gained 4 kilogrammes in weight.

The tumor had so shrunk as to have quite disappeared. These facts, the authors believe, warrant the statement that in seropathy a cure for cancer has been secured.

SURGERY OF THE BILE DUCT.

Michaux practiced laparotomy for exploratory purpose in eight cases in which there was biliary obstruction of the ducts. In two he found calculi in the hepatic duct, two had calculi in the gall bladder, one had a cancer in the head of the pancreas. In eight, there was cancer of the liver. He dilates on the great difficulties in the way of exploring the bile passages in malignant disease, particularly the retro-duodenal or retro-pancreatic regions.

Correct diagnosis in these cases, he alleges, is extremely difficult. He believes that medical treatment should be always thoroughly tested before radical surgery is had recourse to. He prefers the median incision with a second at right angles if necessary. He is not a partisan to operations here "en deux temps."

Heycen—Le Mercredi Medical, No. 20, 237—presents to us an interesting observation on cancers of the stomach.

His patient was a young man of 24 years. The disease was a cause of the most agonizing pains and distress. Believing that these were adhesions of the viscera or an undue pressure which might possibly be relieved by an operation and a gastrotomy, this surgeon made a laparotomy, but the extent of cancerous infiltration was so great that he could do nothing. Now, the strange feature about the case was, that the young man enjoyed immediate and permanent relief after the abdominal section. His appetite and strength returned. He was now hopeful of recovery, when an uncontrollable diarrhea set in and carried him away.

Medicine.

IN CHARGE OF

DR. E. W. BING, Chester, Pa.

THE COLD BATH IN THE PNEUMONIA OF CHILDREN.

M. Comby calls attention to the excellent effects yielded by balneotherapy in the pneumonia of quite young infants. Applied at a temperature of 25 or 20 degrees C., according to age and circumstances, the cold bath is most serviceable in reducing the temperature, restoring lost tone, and slowing the pulse and respiration. Chemical antithermic agents, such as antipyrin, quinine, etc., are generally useless, and may be dangerous. In his words, M. Comby gives cold baths to all his little pneumonic patients whose temperature exceeds 39 degrees C. (102.2 degrees F.), and whose hearts are not diseased. Quite recently he had an opportunity of noting the good effects of this treatment in a little boy affected with influenzal pneumonia of the right apex, uninfluenced by ordinary antithermic drugs. M. Comby adds that baths of 25 degrees C. are quite well supported by even very young infants. M. Sévestre states that the application of the above treatment determines the onset of the crisis on the fifth instead of the seventh day, and so materially shortens the duration of the disease. M. Rendu also characterizes the cold bath treatment as the best means of obtaining prompt defervescence in the pneumonia of adults. M. Siredey informs us that at the Aubervilliers fever hospital he has derived great advantage from the employment of cold baths in the treatment of bronchopneumonia consecutive to specific fevers, and M. LeGendre made a statement corroborative of their efficacy in all congestive complications of eruptive fevers. Professor Hayem says that at the Hospital St. Antoine the most fatal disease of all is pneumonia, and that eighteen out of twenty of these patients are "alcoholics." During the first two years, 1879-1880,

he lost 50 per cent. of these cases. He then instituted the cold bath treatment and the mortality fell to 27 or 28 per cent. For some time past this mortality has further diminished (to 8 or 10 per cent.), but this improvement he ascribes to a new special treatment he has devised for the benefit of these alcoholic patients. Employed in the creche attached to his wards, Professor Hayem finds the cold baths more powerful for good against pneumonia than when used for adults.—Lancet.

SUCCESSFUL TREATMENT OF PUERPERAL SEPTICEMIA WITH ANTISTREPTO- COCCIC SERUM.

Dr. Jacquot, of Creil, near Paris, reports an instance where Roger and Charrin's serum was successfully applied in combating the above-mentioned dangerous condition. After quinine and intra-uterine douching had been unsuccessfully tried, the temperature reaching 40.8 degrees C. (105.4 degrees F.), 30 c.c., of the serum were injected. In a few hours the temperature had descended to normal. Two more injections were given, and the woman appeared to have quite recovered. Three days later, however, the patient's mother fell ill with erysipelas of the face, and this seems to have determined in the accouchée (two days later still) rigor accompanied by a temperature of 104 degrees F. Three days after this relapse a fresh injection of the serum was practiced, the temperature falling quickly to normal. From this time forward recovery was uninterrupted. This case serves to illustrate the prompt antithermic action of the serum and the intimate connection existing between puerperal fever and erysipelas.—Lancet.

MICROBIC ASSOCIATION IN TUBERCULOSIS.

Maragliano (Clin. Mod., April 15, 1895) would explain the varying course of phthisis in different sub-

jects by the absence or presence of micro-organisms other than the tubercle bacillus. For him the tubercle bacillus is responsible for the tubercle nodule solely, and for a certain diminished resistance of the tissues created by its proteins or its toxins, and so rendering them more susceptible to the attacks of other micro-organisms. It is to these latter that we owe the pneumonic and caseous foci so frequently found in the course of phthisis. Unless other micro-organisms come it may be that the tubercle bacillus may give rise to no symptoms during life, and occasionally one finds post-mortem tubercle nodules where there has been no suspicion of phthisis during life. Most of the secondary symptoms of phthisis—for example, fever, wasting, broncho-pneumonia—are, according to the author, due to the superposition of micro-organisms other than the tubercle bacillus; and it is just because the air of mountains and of the sea is so free from these organisms that it is so negatively beneficial to the phthisical. This conception of mixed infection in phthisis was broached by the author in 1891, and seems to throw light on the clinical course of pulmonary phthisis.

A NEW VARIETY OF THE BACILLUS ANTHRACIS.

Chauveau and Phisalida (Sem. Med., April 27, 1895), in experimenting on guinea-pigs with cultures of the bacillus anthracis, attenuated by the action of compressed oxygen, have obtained other cultures, disclosing a new variety of this microbe, which they name the bacillus anthracis claviformis because of its key-like or bell-clapper-like form. This organism is permanent and specific in its form, and physiologically is distinguished by its total want of virulence in all but very large doses. It also possesses only the feeblest immunizing power, and neither this nor the original virulence of the anthrax bacillus can be restored to it by the usual procedures.—Br. Med. Jour.

Electro-Therapeutics.

IN CHARGE OF
DR. S. H. MONELL, New York.

"THE DOSE FOR IMMORTALITY."

Among the Chinese *Panax quinquefolia*, or ginseng, is given to ward off or remove fatigue, invigorate the feeble, restore exhausted animal power, to make the old young—in short, to render man immortal. It is found in the mountains of Shantung and Leotung, but now most of it is imported from this country.

Its very name, ginseng, signifies the wonder of the world, or the dose for immortality, and directions for gathering are upon the first two days of the second, fourth and eighth moons, when the stars are said to be propitious.

An investigation will prove the common belief that the aborigines were well versed in botanic medicine to be erroneous, as most of the plants used had no medicinal virtue, and were used because of their supposed resemblance to some part or organ of the body, or again, because the priest or physician had a dream to get this certain plant, and so it became fixed in the primitive *materia medica*. As before stated, none of these remedies were effective until some mysterious process had been performed and certain ceremonies were executed which had for their office the transference of power from the tutelary god to the plant. However, some remedies were used which were of great value, although all were subjected to the same ritualistic forms before using; yet a striking example of the union of both may be shown.—Johns Hopkins Bul.

CANNED HORSE.

The suggestion in the *Journal* of April 13, concerning the utilization as a food supply of the immense droves of wild horses in Oregon, Washington, Idaho and Montana, has developed the fact that some of the salmon cannery on the Pacific coast had already turned their attention in that direction. One firm has put "canned horse" on the

San Francisco market where it has been served in restaurants. The local papers say the flesh resembles beef in appearance, and cannot be told from it by taste. "The grain of the flesh is fine, and dozens of people have sampled the canned horse, and are unanimous in pronouncing it good, though there was not one of them but confessed to a prejudice against the eating of horseflesh." Another firm has organized at Portland, Ore., for canning on a large scale; it has bought 6000 horses at from \$1 to \$5 apiece and is contracting for great numbers, expecting to supply a palatable, nutritious flesh-food at one-quarter to one-half the price of beef. It only remains for the learned lexicographers to put a name to it; "horseflesh" obviously will not answer; it is too suggestive.—*Journal A. M. A.*

TELEPHONES AND THUNDERSTORMS.

Do overhead telephone wires exercise a controlling influence on the electricity of the atmosphere? That the converse occurs is evidenced only too plainly by the disturbances in telephonic communication which result from the presence or proximity of a thunderstorm. More than one instance may be recalled of a telephone wire being struck by lightning, to the detriment of the instrument and to the discomfiture of the listener. But do overhead wires ward off lightning? We are indebted to the "Decorators' Gazette and Plumbers' and Gasfitters' Review" for the "fact" that the risk to buildings of being struck by lightning in places unprotected by overhead telephone wires is nearly five times greater than in places provided with a telephone system. An immunity of this kind cannot be considered improbable. It is to be remembered that an overhead telephone wire becomes in point of fact a lightning conductor, and in this capacity may act in two ways: 1. By equalizing differences of potential it may prevent the occurrence of the disruptive discharge; or (2) receiving a lightning charge it may carry the current

to earth. With reference to the first point there can be little doubt that overhead conductors, if connected to earth, do play an important part in the distribution of atmospheric electricity. Lord Kelvin, in a recent paper (read before the Philosophical Society of Glasgow), states that the difference of potential he obtained between the earth and an insulated burning match placed nine feet above the ground was 200 to 4000 volts. What, then, is the result of permanently connecting by a good conductor the earth and the atmosphere directly above it, a condition which exists in the case of single-wire telephone circuits? Such an arrangement must tend to equalize potential and prevent the accumulation of those charged masses which no doubt form the nucleus of the storm cloud. This equalization will continue to take place in all conditions of weather. But when a storm does occur it is obvious that if struck by lightning the wire carries the current to the point of greatest danger, viz., to the instrument and to anyone in its vicinity. Therefore, unless the strictest structural precautions be taken such a wire becomes a source of danger, rather than of safety. To obviate this danger every post or support for overhead wires ought to be fitted with a lightning guard, and every instrument, whether using the earth as a return or not, should be fitted with an efficient form of lightning arrester. Where the overhead wires are not connected to earth, as is the case with overhead "lighting mains" and "twin" telephone circuits, any equalizing effect upon potential difference is practically lost, and any circuit connected with overhead wires of this kind must be dangerous, inasmuch as such wires become lightning conductors in all but the saving device of an earth connection. For "lighting mains" it can scarcely be doubted that the underground system is in most respects the better: (1) For obvious reasons connected with the size of the cables; (2) for the electrical reason that, if carried overhead, no earth connection is allowable by the rules of the

Board of Trade. For telephones the adoption of the "twin wire" system seems to bring with it the advisability of placing the wires below the surface of the ground, inasmuch as this system does away with the earth return as part of the circuit. It therefore appears that from an electrical point of view there may be in overhead wires an element both of safety and of danger. The latter will certainly predominate, unless supports be protected with lightning guards and every instrument provided with an efficient "protector"—that is, with an unfailing means of carrying a strong current to earth without passing through the instrument. Is this secured in practice? Can it be secured with any certainty by even the best lightning arrester or earthing device of any description? So long as the coarse expedient of a connecting wire is necessary for the guidance of electrical energy, so long must this question of "wiring," with its safeties and its dangers, be one of great and growing interest. But it may be pointed out that if every house were fitted with an efficient form of lightning guards a greater immunity from lightning discharges would be secured than that which at present exists with the closest network of overhead telephone wires.—London Lancet.

THE TREATMENT OF UMBILICAL HERNIA IN CHILDREN.

Cahir (Rev. de Chir., April, 1895) lays down the following rules as to the treatment of umbilical hernia in infants and young subjects. Apart from certain exceptional conditions in children below the age of 18 months, whether of rich or poor parents, attempts should be made to cure the hernia by a firm pad and an abdominal bandage. In such cases a flat pad should always be preferred to a conical one. Children from 2 to 7 years, if belonging to well-to-do parents, and well cared for, should be treated in like manner; but if the parents be poor, hard-working, negligent or ignorant, it will be found useless to attempt any cure of

umbilical hernia by such simple means. There are no good grounds, the author states, for attributing to this treatment of umbilical hernia the subsequent protrusion of a hernia sac in the inguinal region. If any temporary affection of the respiratory organs, such as bronchitis, whooping cough, or laryngitis, should occur during the application of the pad and bandage, such treatment ought to be interrupted whilst the chest trouble lasts, and afterwards renewed and steadily maintained. Operative treatment by one of the numerous modern methods is indicated in the following cases: (1) When an umbilical hernia in an infant causes symptoms of strangulation, or is associated with persistent gastrointestinal troubles which cannot be attributed to any other cause. (2) Also in young subjects from 2 to 7 years of age in whom like symptoms are caused by umbilical hernia. (3) In children from 2 to 7 years of age, suffering from umbilical hernia, who in consequence of defective means of retention or of careless treatment remain with the hernia in much the same condition after the use of pad and bandage continued for 12 or 18 months. (4) In children over 7 years of age suffering from unmanageable or irreducible hernia presenting a tendency to increase in size. (5) When the skin over the hernial swelling is ulcerated and inflamed. (6) When the existence of an umbilical hernia is likely to interfere with the patient's career in any special calling. (7) When the hernial ring is large. (8) When the patient is subject to stangulation or to inflammatory attacks. (9) When the hernia, by exciting pain and gastro-intestinal disturbances, seriously impairs the development of the young subject.

MAKING VACCINATION ODISIOUS

If it is true, as reported, that two physicians of the New York City Board of Health recently vaccinated 1000 children in nine hours, that is a fraction over 18 a minute, the following comment of the Bangor (Me.) Commercial is just and timely: "To say that vaccination could be proper-

ly performed at this reckless, break-neck rate is simply ridiculous. But possibly these eminent practitioners wanted to give the impression that vaccination is a humbug and did their work with that end in view.—
Journal A. M. A.

Miscellany.

STREET NOISES.

The essence of good government has been defined as "the greatest happiness for the greatest number," and it is surely time to reiterate the question whether something cannot be done to make life less unendurable for those who work with their heads and are compelled to live in great cities. We believe we are correct in saying that in no foreign town and in few other British towns is such license given to anyone to earn a living by annoying his fellow creatures as in London. From an early hour in the morning the air is thick with the raucous yell of men and boys selling race cards and half-penny news-sheets. Later in the day the torment is aggravated by piano organs, so-called bands and street singers, while at a late hour of the night it is quite common to be disturbed by hordes of ruffians with voices like fornhorns roaring out imaginary and highly spiced details of a murder which has never happened or some even more unsavory subject. The police, it appears, are powerless. News vendors cannot be interfered with if they move on, and they do move on—in a circle. Organs, we fancy, can only be moved from in front of the complainant's door, and as a piano organ is perfectly audible 200 yards away this remedy is useless. There is only one remedy, and that is to compel anyone who wishes to make a noise in the street for the purpose of getting money to pay a heavy license for the privilege of so doing. No one would object to the sale of papers if it were not accompanied by howls worthy of an eighteenth century madhouse. Rates and taxes rise with the utmost regu-

larity every year, and it is not too much to ask that something should be done to obviate a nuisance which gets yearly worse and worse. The ringing of church bells, which, except those of St. Paul's, are always out of tune, should on no account be allowed in London except for five minutes or so before service. Everyone who goes to church knows perfectly well at what time to go, and those who do not go probably do not want to know. In the ages of faith the ringing of bells drove away devils, but the latter-day fiend who yells "Paiper" and grinds organs is proof against their power, and to ring bells is but to add one more unnecessary noise to the large number of necessary ones, which already exist. We have pointed out on several occasions that there is no legal right to ring or toll a bell except before morning and evening prayer or on the occasion of a funeral, and that the ringing of a bell previously to the celebration of the Holy Communion, which often now occurs in the early hours of the morning, is wholly illegal and unwarrantable. It is a great torture to many sick and weakly people.—Lancet.

BACTERIOLOGY OF GASTRIC FERMENTATIONS.

Kaufmann (Berl. klin. Woch., 1895, Nos. 6 and 7) says that different micro-organisms behave differently in the presence of free hydrochloric acid. The cholera bacillus is very susceptible, the typhoid bacillus less so, and the tubercle bacillus and anthrax much less so. Generally speaking the micro-organisms which split up carbo-hydrates are less susceptible than those which split up nitrogenous material, whereas those that cause lactic acid fermentation are the most resistant. The important part played by micro-organisms in the alimentary canal is not doubted, but it is also very desirable to know what micro-organisms normally inhabit the stomach. Hydrochloric acid combined with albuminous bodies has its antiseptic as well as its digestive powers diminished. When free hydrochloric acid only ap-

pears, as in nitrogenous feeding, four hours after digestion it can offer little hindrance to the growth of pathogenic and non-pathogenic micro-organisms. At present it is unexplained whether fermentation occurs at the height of normal digestion. The absence of fermentation, then, might be ascribed to the presence of the free acid. But fermentations are often absent when free hydrochloric acid is wanting, and are present when it exists in large quantities. In stagnation free hydrochloric acid cannot prevent fermentation. In all cases of disordered fermentation in the stomach containing much hydrochloric acid there has always been gastric dilatation. In one case fully investigated by the author a neurasthenic patient suffered from atony of the stomach, and a considerable increase in bacteria in the living state was observed in spite of an excess of free hydrochloric acid. Among other micro-organisms frequently found the bacillus subtilis is often present, but whether it acts as a fermentative agent cannot be stated at present. The author found in this and in another case a micro-organism very like the *B. coli communis*. This is curious, as this micro-organism cannot exist in gastric juice containing free hydrochloric acid. Perhaps it has some relation to fermentation. The chief interest of this case was the occurrence of fermentation at the height of digestion, in spite of free hydrochloric acid.

A PHILADELPHIA INCIDENT.

The Philadelphia Record is authority for the following case of dislocation of the inferior maxilla. The Record calls Dr. Pancoast "a considerate physician:" "A downtown woman, who justly bears the reputation of a common scold, recently became so enraged at some action of her inoffensive husband that in endeavoring to do justice to her feelings she threw her jaw out of place. Of course she was immediately silent and her husband, although he hurried with her to Dr. Pancoast's office, experienced a sensation he

had not known for years, for he berated his wife soundly and received no words in reply. Perceiving that the woman was impatient to give her husband a scolding Dr. Pancoast purposely allowed her to wait for half an hour, while he attended to others, and then, telling the husband to get out, he threw the jaw back in place. However, he placed a tight bandage under chin and advised her to keep it there for some time, in order to give the husband a much needed rest."—Journal A. M. A.

THE MEDICAL SOCIETY OF NEW JERSEY.

The next annual meeting of the Medical Society of New Jersey will be held in the Hotel Stockton, Cape May, Tuesday and Wednesday, June 25 and 26, 1895.

PROGRAMME.

Prayer by Rev. J. W. Cockins, Cape May; report of Committee on Credentials, secretary, chairman; calling roll; address of welcome by Mayor of Cape May; report of Committee on Arrangements, George E. Reading, M. D., chairman; reading of minutes (abstract) of last annual meeting; report of Committee on Business, H. R. Baldwin, M. D., chairman; election of permanent delegates; any business which requires early consideration may be introduced; report of Committee on Ethics and Judicial Business; report of treasurer, Dr. A. Mercer; report of corresponding secretary, Dr. E. L. B. Godfrey; report of Committee on Honorary Membership and Honorary Degree of Doctor of Medicine, Dr. H. G. Taylor, chairman; report of Standing Committee, H. W. Elmer, M. D., chairman. (Five minutes will be allowed each delegate for remarks upon the same); report of Committee on "Prevention of Blindness through Legislative Enactment," W. B. Johnson, M. D., chairman; report of Committee on "Bovine Tuberculosis," etc., J. W. Stickler, M. D., chairman; report of Committee on "Relation of Physician and Pharmacist," H. L. Coit, M. D., chairman; announcement of committees by the president; annual address by the president, O. H. Sproul, M. D., "Dis-

eases of Pregnancy and Parturition;" paper by J. W. Stickler, M. D., "Some Original Investigations Showing the Antagonisms between Morphine and Cocaine;" discussion, "Practice of Journal of American Medical Association in Advertising Secret Nostrums;" discussion upon subject presented at last annual meeting, "Comparative Advantages of Water Hot or Cold, versus, Germicidal Solutions in Modern Surgery." Dr. W. B. Johnson was appointed to take the leading part in the discussion. Report of delegates to and reception of delegates from corresponding societies; essay, third vice president, D. C. English, M. D., "Our State Medical Society, Its Past Success, Present Needs and Future Prosperity;" report of Committee on Treasurer's Accounts; acting upon amendments to by-laws proposed at last annual meeting; amendment to Section 12 of by-laws as follows: "The Committee on Nominations shall consist of one delegate from each district society represented, who shall be chosen by his own delegation and the vote of the delegate so chosen shall be counted in the sessions of the Nominating Committee as equal to as many votes as his district society has members, the membership of district societies to be determined by the amount of dues paid to the treasurer of the State society." Report of Committee on "Fellow's Prize Essay," J. G. Ryerson, M. D., chairman; investigation of by-laws and communications from district societies; reading of such papers as are approved by the Business Committee; reports of interesting cases; report of Nominating Committee; election of officers; miscellaneous business; adjournment.

OFFICERS.

President, O. H. Sproul, M. D., Flemington; first vice president, William Elmer, M. D., Trenton; second vice president, T. J. Smith, M.D., Bridgeton; third vice president, D. C. English, M. D., New Brunswick; corresponding secretary, E. L. B. Godfrey, M. D., Camden; recording secretary, William Pierson, M. D., Orange; treasurer, Archibald Mercer,

M. D., Newark; standing committee H. W. Elmer, M. D., Bridgeton; William H. Iszard, M. D., Camden; Henry Mitchell, M. D., Asbury Park.

AMERICAN MEDICAL PUBLISHERS.

This Association held its second annual meeting at the Eutaw House on the 6th and 7th of May, with the following in attendance:

Dr. J. C. Culbertson, Cincinnati, O.; Miss Dora Jones, St. Louis, Mo.; Dr. John C. Le Grand, Anniston, Ala.; Dr. C. F. Taylor, William B. Saunders, Philadelphia, Pa.; Miss Hackedorn, Toledo, O.; Dr. F. E. Stewart, Detroit, Mich.; J. MacDonald, Jr., Irving J. Benjamin, Dr. Ferdinand King, Dr. H. P. Fairchild, New York City; Dr. R. W. Lowe, Bridgeport, Conn.; Dr. W. C. Wile, Danbury, Conn.; Dr. H. M. Simmons, Dr. William B. Canfield, Baltimore, Md.; H. A. Mathie, Dr. A. H. Ohman-Dumesnil, Dr. I. N. Love, St. Louis, Mo.; Dr. Landon B. Edwards, Richmond, Va.; Dr. Hudson, Austin, Texas; Dr. William F. Bartlett, Philadelphia; Dr. T. D. Crothers, Hartford, Conn.; Dr. Gilbert I. Cullen, Cincinnati, O.; Dr. Henry S. Upson, Cleveland, O.; Dr. E. E. Holt, Portland, Me.; J. M. Grosvenor, Jr., Boston; Charles Wood Fassett, St. Joseph, Mo.

Nineteen new members were admitted and questions of the day affecting medical publishers were profitably discussed.

Beginning with July 1 a monthly bulletin will be issued for the benefit of members of the Association. It is to be edited by Drs. P. H. Fairchild, J. MacDonald, Jr., and Ferdinand King, New York City; Dr. J. C. Le Grand, of Anniston, Ala., and Charles Wood Fassett, of St. Joseph, Mo.

The secretary was authorized to issue in pocket form a revised list of medical advertisers.

Upon invitation the Association banqueted with the medical editors on Monday evening.

The officers re-elected were as follows: President, Dr. Landon B. Edwards, of Richmond, Va.; vice president, Dr. H. C. Culbertson, Cincinnati,

O.; treasurer, J. MacDonald, Jr., New York City; secretary, Charles Wood Fassett, St. Joseph, Mo. Dr. J. C. Le Grand and Irving J. Benjamin were elected on the executive board.

THE STOMACH TEST IN MURDER TRIALS.

In the Boston Medical and Surgical Journal of February 28 Dr. Gustav Liebmann contributes a short paper on this subject. He stated that the object of this test is to ascertain, by the presence or absence of solid contents or by the intermediary stages of liquefaction of food found in the stomach, how far the process of digestion has advanced, giving thus a clue as to the time at which the death of the victim has taken place, provided the time of the last meal be known. In order to arrive at an exact, or at least approximately exact, conclusion, the first and imperative condition would be a uniformly established schedule of time in which the different phases of digestion should be completed. If there be such a physiological law, from which there is practically no deviation, we should place full reliance upon the test; but if there be, in healthy people even, numerous exceptions or deviations the test must of necessity be open to errors. Dr. Liebmann considers that this latter proposition is the true one. The different variations in the duration of the digestive process depend upon the following conditions: 1. The length of time necessary for the transformation of solids into chyme in healthy individuals varies a great deal according to the digestibility of the different foods. 2. The length of time necessary to expel the ingesta from the stomach into the duodenum in the healthy individual varies according to the quantities of food taken. Not only does it take a longer time for larger quantities to be impelled on, but the motor activity of the stomach walls is diminished by the greater distension produced by the larger amount of food present. Thus, pieces of meat are frequently found a day or longer after

ingestion. 3. The shorter or longer stay of food depends on the amount of acidity, which varies in different stomachs even within the border line of health. 4. Much variation even in health is caused by individuality, by presence or absence of pepsin, hydrochloric acid, psychical factors and emotions (fright, fear, grief, or the opposite, as joy or exaltation). We see, therefore, that owing to the many physiological variations, which do not permit of any reliable deductions even in the healthy, the forensic value of this test must be considerably impaired.

TRANSIENT CLUBBING OF FINGERS DURING EMPYEMA.

Schon (Ugeskrift for Laeger, No. 6, 1895), reports the following case: A girl, aged 10, presented symptoms of a localized pneumonia in the upper part of the lower lobe of the left lung, which later spread over the whole lung. As the disease did not progress in the orthodox manner and the temperature kept high an empyema was suspected. On the seventeenth day of illness there were physical signs of fluid, and pus was withdrawn by the aspirator. The following day the usual operation was performed, and the same evening the temperature was normal, and remained so throughout the illness. Some time after the operation the deformity of the fingers was noticed. This became very marked; the terminal phalanges were enlarged, both from side to side and in the dorso-volar direction; the nails were abnormally convex, but their color natural. The deformity quickly disappeared, and by the time the sinus had closed the patient's fingers were quite normal again. The author regrets his neglect to make a bacteriological examination of the pus evacuated from the pleura, as he thinks this affection must in some way be connected with pyogenic bacteria or their products. It has been noticed in connection with other suppurating processes, as, for instance, by Marfan in a case of pyelonephritis. The author has found only four similar cases previously published, two by Maigard.

TRANSFUSION OF BLOOD.

V. Ziemssen (Munch. med. Woch., April 2, 1895) maintains that the transfusion of non-defibrinated blood from arm to arm is a valuable therapeutic measure. The infusion of saline solution is most useful in cases of acute loss of blood threatening life, but the effect is fleeting. It is not always easy to say which of the two procedures is the better one. The weakness of the cardiac muscle with insufficient filling of the aorta, the amount of hemoglobin and red cells in the blood, furnish important indications. In hemorrhage due to wounds, childbirth, etc., the blood-forming organs are unimpaired, but this is not the case in progressive anemias due to internal causes. In malignant forms of anemia the regenerative power of the blood is lost, and therefore little can be expected from the infusion of saline solution. In cases of repeated hemorrhages in gastric ulcer, typhoid fever, abortion, infusion leaves much to be desired. The author then records a case of gastric ulcer with repeated hemorrhages. The hemoglobin stood at 50 per cent., and the red cells at nearly 2.14 millions. Owing to danger to life 1 litre of 0.6 per cent. saline solution was subcutaneously infused. This was followed by improvement, but the general condition again became threatening; 175 c.cm. of non-defibrinated blood was infused intravenously. From this time the patient steadily improved. She was subsequently treated by subcutaneous injections of sol. natrii arsenicosi (1 per cent.) with the best results. Without the infusion of blood the patient would, in the author's opinion, certainly have died. No immediate increase in the hemoglobin or red cells takes place, so that the author would attribute the good results to the stimulation of the blood-forming organs. The depression in the blood pressure, even for some time after the quantitative and qualitative improvement in the blood, is striking. It is doubtful whether it is desirable to wait much beyond 12 hours after the infusion of saline solution before having recourse to the transfusion of blood.—Br. Med. Jour.